

Howard Luke Academy Emergency Trauma Technician (ETT) Course (Final Report)  
Fairbanks, Alaska  
Spring 2001

Instructors from the North Pole Fire Department took on the challenge of instructing an entire Emergency Trauma Technician (ETT) course at the Howard Luke Academy High School in Fairbanks, Spring 2001. Fifteen students completed the course and seven became ETTs. Of the group, 53% were female, 47% male of whom 65% Alaskan Native, 24% white, and 11% Hispanic. The lead instructor, Barbara Michael, wrote up a great report that discusses the challenges, benefits of the course and suggestions for improvement.

**Pre-Tests and Post-Tests:**

In order to see what knowledge the students brought with him or her to the class, each student was given a pre-test before instruction began. These were used at the completion of the course to show improvement and retention of information. The pre-test was only for comparison and did not affect overall grade.

The average pre-test score was 38%.

The average post-test score was 70%. Although this score may look low, there was significant progress made by the students.

This class of ETT students successfully graduated seven students, who are now State of Alaska ETTs. Although the remaining eight students did not successfully become ETTs, they were successful in other ways. They gained a wealth of knowledge and skills that they will be able to use the rest of their lives. In several, this class has acted to spark their interest in either emergency services or other related medical fields. We are equally proud of all 15 students for completing the course.

**Essays:**

Each student was given an essay assignment at the beginning of the course. The students were asked to "Compose an essay to relate the reasons why you desire to become an Emergency Trauma Technician and what you hope to be able to do at the conclusion of this course."

Many reasons from wanting to be able to help family/friends, interest in the medical field to just needing the credit to graduate were cited.

Each student was also given an essay assignment at the conclusion of the course. The assignment was "Provide an essay of what you have learned or gained from this course. How is this similar to or different from what your expectations were at the beginning of the course? How do you anticipate using your ETT skills?"

Answers to this essay almost all included the feeling that each student was now more prepared to handle real-life situations, whether they were ETTs or not. Several students expressed that they did not wish to continue in the medical field, but were thankful for

this class and hoped that this program would be continued so that other students would be able to benefit from it as well.

### **Quizzes:**

Quizzes during the ETT class did not go as well as expected. From our experience, we found that the students have been conditioned that a curve be given on their quizzes as is done in other classes. We found this to be the case as quiz scores were quite low. We know that the students knew the information, because we quizzed them constantly verbally and in skills practice, but when it came to a formal, written quiz, they didn't do very well. As a result, we did use a curve on the three quizzes given throughout the course, but not on the state exam.

We also interjected some creative ways that students could expand their knowledge and participation, as well as earn some extra credit.

One way was to attend a Drunk Driving panel discussion held at another area high school. The panel consisted of a state trooper, insurance agent, former judge and parent. These individuals each presented some information, then it was opened to questions by the students. Our students were told that just attending was not sufficient for extra credit; they had to ask at least one intelligent question of the panel. This event raised good discussion both at the panel and later in the classroom.

Another way students could earn some extra credit was to write an essay on one of several topics the instructors chose. The two topics that students choose from the list were AIDS and Drunk Driving.

Another method of earning some extra credit was to put together a display of current events relating to emergency services.

### **Student Evaluations of the Course:**

At the conclusion of the course, one class period was spent completing course/instructor evaluations.

This six-page evaluation was to serve as a means for the students to express their opinions about the course, content, instructors, and any improvements they would like to see made in the future.

The students were given plenty of time to complete the evaluations and were encouraged to take their time and put some thought into their answers as we felt like this was a very important aspect of the course.

### **Challenges Posed During the Howard Luke Academy ETT Course:**

The challenges encountered during this course were many.

The first hurdle was the motivation of the students. A few genuinely desired to be there, but many were placed in the class by their counselor or were only there for the credits.

This is something that would definitely have to be addressed in the future. One way may

be to do an introduction to students the semester before the class actually starts to give them an idea of what the course expectations are. Those students truly interested in receiving the training could also fill out a course application. A short informal interview could also be utilized to identify those students who wish to attend.

Attendance was of a particular concern to myself and the other instructors. From our medical training, we have always been taught that the class is your priority and if you miss too many classes, you will be dropped from the roster. Not so in high school. Very rarely did we have full attendance, which is quite a drastic change from the EMT classes we are accustomed to teaching. Attendance played a big role in how well the student performed, both on quizzes and with practical skills. Those who did not successfully complete the class were also the ones with the poorest attendance records.

Low self-esteem and lack of confidence was also one of the hurdles that we worked hard each class period to overcome. Initially the students were completely lacking confidence in themselves and their ability to perform skills correctly. With much prodding, positive reinforcement and time, the students did begin to gain confidence in their skills and themselves. This was most evident in the peer instruction that took place during practice sessions and also during a real medical emergency.

Reading assignments posed a particular challenge. Reading comprehension is such a large portion of this course, as not all material can be presented during class time. It was hard to determine if some students were deficient in their reading comprehension skills or were just uninterested in the course material and chose not to read. We did find that students did well during the hands on practice sessions and rated that very high on their evaluations. Luckily, much of the ETT course integrates hands-on practice out of necessity. In the future, I would recommend somehow maximizing this to the advantage of the students, both high school and adult. I'm not sure if videos would be able to achieve this, but would recommend their use when possible. This is one reason why extra credit was given for certain projects. Our goal was to instruct our students on the ETT curriculum and skills, not fail them academically. Their confidence levels were already low when we started this course. If they put in the effort, they were rewarded. If they did not, then it was they who earned the poor grade.

Another challenge unique to the high school setting was that of "Senioritis." As May rolled around, the seniors began to get sparse in anticipation of graduation. The seniors were also released from classes two weeks ahead of the underclassmen, which meant they had to test early and get their paperwork completed. This was not communicated to us at the beginning of the course, which resulted in a bit of tap dancing at the end, but it all worked out just fine.

One final challenge that we found in teaching high school students was that of the short class periods. Our class met two out of three days. Each class period was only 1 hour, 15 minutes. This meant we had to get through lecture material and do hands-on and clean up within our 75-minute time limit. This posed some turmoil because just as the students were getting good quality practice time in on the skill they were just introduced to, it was

time to clean up. Then the next class period, we had to try and pick up where we left off. Sometimes this meant waiting over the weekend if the first class was on Friday and the next was on Monday or Tuesday. This really seemed to chop up the class and definitely disrupted the continuity of the class. I would recommend that at least a two-hour time period per class be set aside, but I am unsure how that would work out with the school district scheduling.

### **Benefits of the Howard Luke Academy ETT Course:**

Although the challenges were many, the benefits did outweigh them. We definitely had the support of the administration, which made our experience a good one. Whenever we had a request, it was taken care of immediately. Although we only popped in and taught one class period a day, we were treated like any other faculty member and felt like we had been a part of the team for much longer than a semester.

One of the benefits from the side of the instructors is that we learned so much from our students. We learned about different cultures and got an insight into what the students thought was important. For instance, after one student had missed two weeks of class, he returned one day. When I asked what had happened to him, he shared with the class his trip to his village on the coast and what all he had done in his absence. Although it didn't related to the ETT course, it was valuable information to myself and the other students. This type of free cultural exchange is one of the reasons why the Howard Luke Academy was where we chose to teach.

Sparkling the interest of the students to continue in the medical field was always one of our goals. We knew that many would not continue, but we were rewarded when a couple of the students did relay to us that they had intentions of continuing their studies to become an EMT or hopefully become a doctor. These same students also expressed their hopes to return to their villages and practice their skills if duty called. This was the beginning of the shift in confidence we saw at the end of the course.

The Drunk Driving Demonstration that was presented to the Howard Luke Academy student body by the ETT class was a huge benefit, not only to the students observing, but also to the ETT students participating. The student body looked on as the ETT class simulated a response to a car crash in the parking lot. A car had been put in place and four ETT students were moulaged to simulate a range of injuries. When the time came, other ETT students responded to the scene and took care of the injured until the fire department and police arrived. This event turned the tide in the confidence level of the class. This demonstration allowed the ETT students to "use" their skills in front of their friends, family and teachers. They did a great job and this event was talked about for weeks afterwards! It made an impact on the student observers, but the best benefit by far was to our own ETT students.

A few weeks following the drunk driving demonstration, a real medical emergency took place on campus and our ETT students stepped up to the task. A fellow student had a grand mal seizure in the main hallway of the school. Our ETT students were right there within seconds and took control of the situation. They tended to the seizing student and

took care of crowd control. The nurse later told me that by the time she responded, the ETT students were doing such a fine job that she stayed off to the side and only observed. The administration had nothing but glowing comments about the event. They were very impressed with the speed and confidence the students displayed during the emergency. The student who had the seizure later thanked the instructors for teaching his classmates what to do. I was so proud of them and, needless to say, their confidence soared. This “unscheduled” emergency proved to them that they indeed had the knowledge and skills to handle a real-life situation.

**Conclusion:**

In conclusion, I would like to say that although challenging, this course was overall a great success!

As instructors, we have learned some things that we would like to do differently if we teach this course to high school students in the future.

We also saw first hand the overwhelming benefits to the students and would encourage your office to fund this training in the future to high school students. In the future, they will be taking care of us. It’s our duty to see that they have the skills necessary to perform the task.